UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,010	06/30/2006	Thomas Lechner	9342-345	1309

20792   7590   06/27/2008
MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627

EXAMINER
MILLIKIN, ANDREW R

ART UNIT	PAPER NUMBER
2837	

MAIL DATE	DELIVERY MODE
06/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>18 March 2008</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-14</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-14</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
           application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

0.   Claim 8 is objected to because of the following informalities: "test rendering" has

no antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

2.   Claims 1-2 & 9-11 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter. That is, test-rendering, identifying,

determining, etc., do not result in a tangible, real-world result. In contrast, in claims 3-8,

a gain factor is stored, a volume setting is normalized, dynamic range is reduced, and a

crest factor of the sampled data is reduced, respectively.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

4.   Claims 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Fay et

al. (U.S. Patent Application Publication 2002/0122559, hereafter '559).

5.   Claim 12:   '559 teaches a mobile terminal adapted to store and reproduce a

score in the format of a MIDI file [0040; 0047; 0195-0206], comprising: electroacoustic

reproduction circuitry (504); storage means for storing the MIDI file (916, 918, 920, 922,

924, etc.); processing means for rendering sampled data from the MIDI file [0044-0047];

reproduction means for transforming the sampled data obtained from the MIDI file into

respective sound reproduction [0044-0047]; and control means for adapting the score

[0162-0190], the control means comprising: means for identifying, from the sampled

data, one or more values and/or one or more combinations of values which are

evaluated based on a desired electro-acoustic reproduction on the mobile terminal; and

means for determining, based on the identified values, one or more parameters suited

for adapting the score with respect to the desired reproduction on the mobile terminal

[0166], wherein said score is adapted to a transfer function of the electroacoustic

reproduction circuitry [0162-0190].

6.   Claim 13:   '559 teaches a mobile terminal according to claim 12, further

comprising: means for reducing a crest factor of sampled data of an adapted score

when being reproduced [0166].

Claim 14:   '559 teaches a mobile terminal according to claim 13, wherein the means

for reducing comprises a dynamic compressor [0166].

7.   Claims 1, 9, & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by the

Ketron SD-1 Mastering Studio webpage.

8.   Claim 1:   The webpage Ketron SD-1 Mastering Studio webpage shows that

the SD-1 Mastering Studio provides users with a method for adapting a score stored in

a MIDI file for being reproduced in a mobile terminal (i.e. the mobile keyboard that can

be seen near the bottom of page 2) to the transfer function of electroacoustic

reproduction circuitry, comprising: rendering the score stored in the MIDI file to obtain

sampled data prior to a reproduction of the score on a mobile terminal (see page 2 at

the top, step 1, "Open a midifile and play"); identifying, from the sampled data, one or

more values or one or more combinations of values which are evaluated based on a

desired electroacoustic reproduction on the mobile terminal (the user listens to the song

playing (step 1), and then identifies, based on the sampled data (i.e., the synthesized

MIDI track), one or more values (i.e., the characteristics of the synthesized MIDI track)

which are evaluated (by the user) based on a desired electroacoustic reproduction on

the mobile terminal (see step 2 at the top of page 2); and determining, based on the

identified values, one or more parameters suited for adapting the score with respect to

the desired reproduction on the mobile terminal (the user picks one of the parameters

on page 3 to change in order to adapt the score with respect to the desired reproduction

on the mobile terminal).

9.   Claim 9:   The webpage teaches that rendering the score, identifying, from the

sampled data one or more values, and determining, based on the identified values, one

or more parameters are performed prior to storing a MIDI file containing the score on

the mobile terminal (users perform the recited steps on their computers using the

Mastering software, and then are able to move these files to their portable keyboards).

10.   Claim 11:   The webpage shows that the SD-1 Mastering Studio provides users

with a computer program product comprising a computer readable storage medium

having computer readable program code embodied therein, the computer readable

program code being configured to carry out the method of Claim 1 (since the Mastering

Studio is software).

Response to Arguments

11.   Applicant's arguments filed 18 March 2008 have been fully considered but they

are not persuasive.

12.   Applicant argues, in response to the 35 USC 101 rejection, that, in independent

claim 1, "parameters are determined that can be used to modify a MIDI file for

reproduction on a mobile terminal via electroacoustic circuitry," and that this is "clearly a

tangible and useful result." However, Examiner notes that claim 1 does not require the

modification of a MIDI file, but rather, the mere "determining" of "parameters." Since

parameters are only determined and not used to provide an output of some sort, there is

no tangible, real-world result.

13.   Applicant argues that Fay does not teach determining parameters for adapting a

score in a mobile terminal and for a transfer function of the mobile terminal's

electroacoustic reproduction circuitry. Examiner disagrees. Fay teaches that a

compression effect can be used [0166]. By using the compression effect, any score that

is played through the compressor will be adapted to a transfer function of the mobile

terminal's electroacoustic reproduction circuitry. If the audio signal fluctuates above a

certain amplitude, the compression object will refer to the "compressor parameters" in order to apply proper compression.

14.   Applicant argues that a portable computer is not a mobile terminal. Examiner disagrees. According to Merrium-Webster, mobile is defined as something that is "capable of moving or being moved" and terminal is defined as "a combination of a keyboard and output device (as a video display unit) by which data can be entered into or output from a computer or electronic communications system." Thus, a notebook computer qualifies as a "mobile terminal," as is the case in Fay, as does the keyboard shown on page 2 of the Ketron SD-1 Mastering Studio webpage (since it is mobile and has a keyboard and a video display unit).

15.   Applicant states that "Claim 12 recites determining the parameters to adapt a score from sampled data, not from a compressed version of the sampled data" and that "Fay does not describe determining parameters to adapt a score for a transfer function of electroacoustic reproduction circuitry" and states that "there is no mention [in Fay] of taking into consideration the transfer function of electroacoustic reproduction circuitry." Examiner disagrees. Claim 12 describes "means for identifying, from the sampled data, one or more parameters," which does not require that the "original" sampled data be used. Since the compressed version of the sampled data is produced from the original sampled data, identifying from a compressed version of the sampled data reads on identifying from the sampled data. Further, in paragraph 166 of Fay, the compression effect identifies, from the sampled data, one or more values which are evaluated based on a desired electroacoustic reproduction on the mobile terminal (fluctuations of the

audio signal above a certain amplitude), and then determines, based on the identified

values, one or more parameters suited for adapting the score with respect to the

desired reproduction on the mobile terminal (it refers to the compressor parameters in

order to apply proper compression). Since compressors reduce the fluctuation of an

audio signal above a certain amplitude, the use of a compressor necessarily "adapts"

audio to a transfer function of electroacoustic reproduction circuitry by guaranteeing that

fluctuations of an audio signal above a certain amplitude are reduced (e.g., to avoid

clipping). Further, the Gain, PostEQBandwidth, and Room parameters, as well as the

Parametric Equalizer, can help to adapt the score to the transfer function of the

electroacoustic reproduction circuitry.

Conclusion

16.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW R. MILLIKIN whose telephone number is (571)270-1265. The examiner can normally be reached on M-R 7:30-5 and 7:30-4 Alternating Fridays (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARM
/Lincoln   Donovan/
Supervisory Patent Examiner, Art Unit 2837